OROVILLE FACILITIES RELICENSING

FERC Project No. 2100

State Water Project Economics

Presentation to
Plenary Group

Department of Water Resources
May 1, 2001
Oroville, California

Overview

- DWR Mission Statement and Responsibilities
- SWP Facilities
- Summary of SWP Financing and Expenditures
- Unit Cost ($/AF) of Water Deliveries
- SWP Power Economics Summary

Mission Statement

"*To manage the water resources of California in cooperation with other agencies, to benefit the State's people and to protect, restore and enhance the natural and human environments*"

Responsibilities:

- prepare and update the California Water Plan . . .
- **plan, design, construct, operate and maintain the State Water Resources Development system to supply good quality water for municipal, industrial, agricultural and recreational uses and for fish and wildlife protection and enhancement**
- protect and restore the Sacramento-San Joaquin Delta by controlling water salinity. .
- regulate dams, provide flood protection and assist in emergency management . . .
- educate the public about the importance of water and its proper use . . .
- serve local water needs by providing technical assistance...

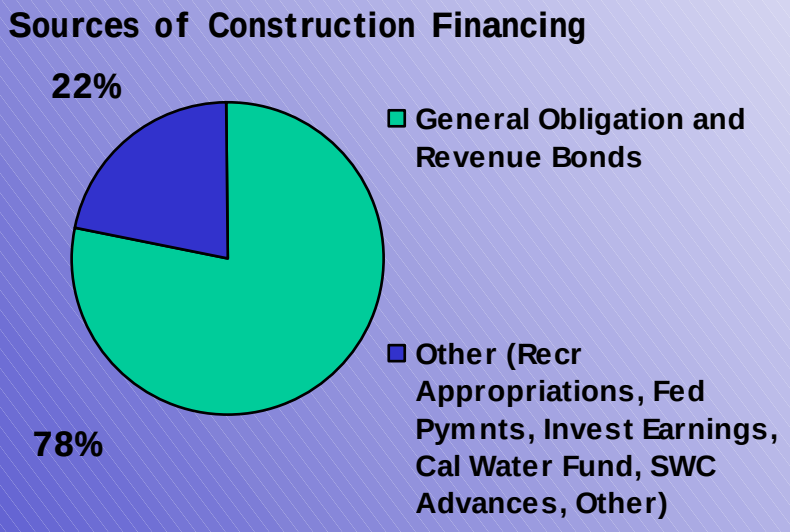
OROVILLE FACILITIES RELICENSING

FERC Project No. 2100

SWP Facilities

Summary of SWP Financing and Expenditures

- SWP cost allocation and repayment is cost-based
- All costs of building and operating the SWP are allocated among project purposes and beneficiaries
  - water supply (including power operation) - State Water Contractors
  - flood control - federal government
  - recreation, fish and wildlife enhancement - State of California
  - SWP contribution to water quality in the Delta - State Water Contractors



Summary of SWP Financing and Expenditures (continued)

Repayment of SWP Through 1998:

- SWC repay, with interest, about 94% of SWP construction cost
- More distant SWC pay higher transportation component
- About $5.5 billion has been spent on SWP construction

Annual Repayment Costs:

- Annual costs total about $600 million per year
  - O&M 25%
  - Power 32%
  - Bond Service 37%
  - Insurance, etc. 6%

OROVILLE FACILITIES RELICENSING

FERC Project No. 2100

Unit Cost ($/AF) for Water Deliveries, by Service Area

Equivalent Unit Charge for Water Supply
Bulletin 132-1998

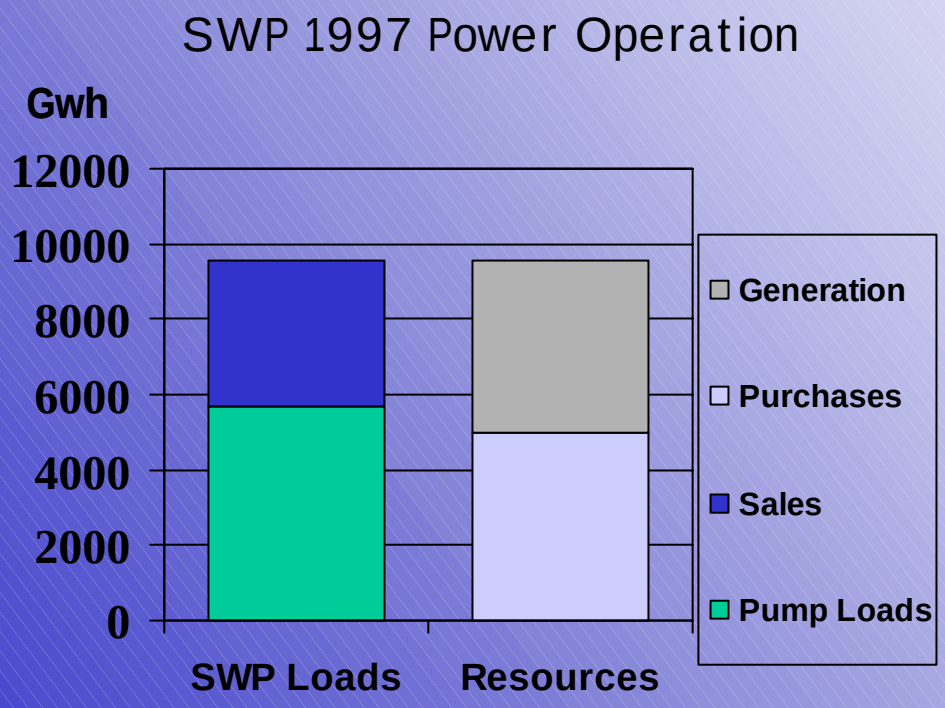
Project Service Area	Transportation				Conservation	Total
	Capital	Operations and Maintenance	Power	Total	Capital and Operations and Maintenance	Equivalent Unit Charge
	[1]	[2]	[3]	[4]	[5]	[6]
Feather River Area	3.86	0.16	0.00	4.02	18.46	22.48
North Bay Area	19.65	5.45	1.72	26.82	3.33	30.15
South Bay Area	25.58	21.50	17.54	64.62	17.04	81.66
San Joaquin Valley Area	12.88	8.56	9.85	31.29	18.11	49.40
Central Coastal Area	445.28	70.76	66.38	582.42	41.32	623.74
Southern California Area	95.21	55.16	56.16	206.53	30.38	236.91

Hypothetical charges, which, if assessed on all entitlement water delivered to date, all surplus water delivered prior to May 1, 1973, and all entitlement water now estimated to be delivered during the remainder of the project repayment period (Table B-5B), would provide a sum at the end of the period financially equivalent to all Transportation Charge and Delta Water Charge payments required under a water supply contract, considering interest at the Project Interest Rate, 4.615 percent per annum.

SWP Power Economics Summary

- The SWP consumes more energy than it produces.
  - Total SWP pump load 1991-1997: 60,016 Gwh
  - Total SWP-owned generation resources 1991-1997: 45,864 Gwh

- Through purchases and agreements, DWR meets its deficits and schedules SWP operations to minimize pump costs and maximize generation sales.



SWP Power Economics Summary (continued).